Botanical name

Acacia inceana subsp. *conformis* Cowan & Maslin, Nuytsia 10: 234 (1995)

The species name commemorates Walter Hokinshed Ince who collected the type specimen in the early part of the twentieth century.

The subspecific name is a Latin word meaning *similar*, and refers to the similar appearance of this subspecies to *A. enervia* subsp. *explicata*.

Common name

None known.

Characteristic features

Phyllodes linear, flat to sub-terete, very narrow (1-2 mm wide), dull green, +/- straight, obscurely multi-nerved, delicately curved-acuminate at apices; *gland* (obscure) 5-15 mm above pulvinus. *Heads* normally globular, on short peduncles. *Flowers* 4-merous. *Pods* thin-textured, pale-coloured. Saline *habitats*.

Description

Habit: Rounded *shrubs* (1.5-)2-3 m tall growing to small obconic *trees* 4-5 m tall. The shrubs are multi-stemmed with their main stems fairly straight and much divided, the canopy is dense, 2-4(-5) m wide and extending +/- to the ground. The trees have 1-5 trunks from ground level (each 8-13 cm diameter at their base) and (together with the branches) sometimes slightly crooked, the canopy occupying about 20% of the total plant height.
Bark. Light- to mid-grey, longitudinally fissured, flakey and friable on trunks of mature trees, the upper branches (and the stems of shrubs) smooth.
Branchlets. Glabrous except often minutely appressed-hairy within axil of phyllodes, also, often sparsely appressed-hairy at extremities but soon becoming glabrous.
Phyllodes. Linear, flat or (when very narrow) compressed to sub-terete, (3-)4-8 cm long, 1-1.5(-2) mm wide, ascending to erect, +/- straight, appressed-hairy and sub-glaucous when young, soon becoming glabrous (except pulvinus) and green, dull; *longitudinal nerves* numerous, indistinct and close together; *apices* delicately curved-acuminate and terminated by non-pungent or +/- coarsely pungent tips; *pulvinus* often minutely hairy on its upper surface; *glands* inconspicuous, 1 or 2 situated on upper margin of phyllode, the lowermost gland 5-15 mm above the pulvinus.
Heads. Paired within axil of phyllodes, globular or sometimes slightly obloid, 6 mm in diameter when fresh, light golden, 10-20(-25)-flowered; *peduncles* 3-6 mm long, glabrous or sparsely appressed-hairy
Flowers. 4-merous; *sepals* free.
Pods. Linear, slightly raised over seeds, straight-edged, 4-8.5 cm long, 2.5-4 mm wide, pendulous to sub-pendulous, firmly chartaceous to thinly coriaceous, straight to shallowly or moderately curved, glabrous, straw yellow to light brown.
Seeds. Longitudinal in the pods, 4- 5.5 mm long, 2-2.5 mm wide, sub-shiny, dark brown (tinged green just prior to maturity); *aril* creamy white (except green at the hilum).

Taxonomy

Subspecies. *Acacia inceana* comprises three subspecies, two of which occur in the Kalannie region, namely, subsp. *conformis* and subsp. *latifolia*. These subspecies are most readily distinguished from one another by their phyllodes, perfectly terete in subsp. *inceana*, flat to sub-terete and 1-2 mm wide in subsp. *conformis*, flat and 3-6 mm wide in subsp. *latifolia*.

Related species. *Acacia inceana* together with *A. lineolata* (not represented in the Kalannie region) and *A. enervia* constitute the "*A. enervia* group", see Cowan and Maslin (1995) for discussion.

Acacia enervia subsp.*explicata* is the only representative of that species occurring within the Kalannie region and subsp. *conformis* is distinguished from it by its commonly slightly narrower phyllodes with the gland further removed from the pulvinus, 4-merous flowers and slightly wider pods.

Distribution

Restricted to Western Australia where it extends from near Morawa southeast to Hines Hill and east to Boorabbin (about 90 km west of Coolgardie).

Acacia inceana subsp. *conformis* is common around the margins of salt lakes, especially in the eastern part in the Kalannie region.

Habitat

Over its geographic range (including the Kalannie region) this subspecies is seen to be highly salt-tolerant and is found growing in alkaline dark red-brown, coarse clay-sand overlying yellow-brown coarse clay-sand or sandy loam at margins of salt pans or lakes

Recorded from the following Kalannie region Land Management Units. Colluvial Flat-Earth; Alluvial Sand over Clay.

Conservation status

Currently listed as a Priority 1 taxon on the Department of Conservation and Land Management's *Declared Rare and Priority Flora List*. However, this subspecies is common in parts of the Kalannie region and in comparable habitats at least as far south as Mollerin (it is probably also common elsewhere over its geographic range). This subspecies should therefore be removed from the Priority List.

Flowering

Over its geographic range subsp. *conformis* flowers from August to September.

In September 1997 most plants in the Kalannie region were in full flower, however, some were sterile or in bud.

Fruiting

Over its geographic range this subspecies produces pods with mature seeds from November to January.

Most plants in the Kalannie region were with mature seed in early December 1996, however, some were sterile. This suggests that local conditions (perhaps the incidence and/or intensity of rainfall events particularly) influence seed-set.

Although the pods are numerous, they are scattered over the plants (not occuring in bunches) and it is therefore time-consuming collecting them by hand. The most efficient way of collecting seed in quantity is to manually shake or gently beat the branches and collect the pods and seeds on a ground sheet.

There are about 175 000 seeds per kilogram. *Note*: This figure is derived from a single sample counted by Angela Waters (Kalannie Tree Supplies) and would most probably have included both viable and non-viable seeds.

Biological features

No information available.

Propagation

Propagate from seed.

This subspecies is easy to germinate. Informal germination tests, using various hot water treatments, were conducted by Angela Waters (Kalannie Tree Supplies). Excellent results were obtained by either soaking the seed overnight in just-boiled water prior to sowing, or by boiling the seed for 1 minute prior to soaking. Even untreated seed showed a fairly good germination response.

Revegetation

Subspecies *conformis* has high potential for use in regenerating saline sites. Under natural conditions it forms large, dense populations around the margins of salt lakes and salt pans in many areas. Also, in places it develops large regrowth populations along road verges. On account of its large growth habit and its ability to form dense populations in marginal areas, subsp. *conformis* is very suitable for soil stabilisation around saline lakes and the creeklines leading into them.

Utilisation

Salinity control. See Revegetation above.
Erosion control. See Revegetation above.
Shade, shelter and visual screen. On account of its dense spreading crown this subspecies has potential for providing shade and shelter for stock and wildlife in inhospitable saline areas, and would be suitable for use as a visual screen.

Reference

Cowan, R.S. and Maslin, B.R. (1995). *Acacia* Miscellany 15. Five groups of microneurous species of *Acacia*, mostly from Western Australia (Leguminosae: Mimosoideae: section Plurinerves). Nuytsia 10(2): 205-254.